

NREM Forestry Program Mission, Goals, and Objectives As They Relate to SAF Accreditation Standards

The Society of American Foresters (SAF) accreditation standards specify the technical, professional, and interpersonal skills needed for a successful career. The NREM forestry option fully supports these standards. Our departmental mission, vision, undergraduate mission and strategic objectives are listed below. Following that are descriptions of our support of each of the four SAF guidelines:

NREM Mission

To increase public awareness and understanding, through teaching, research and Extension, of the ecology, management and sustainable use of natural resources that are important for maintaining ecosystem health, species diversity, agriculture and forest production, hunting and fishing, and the enjoyment of experiencing nature in Oklahoma and beyond.

NREM Vision

To be recognized as the source of cutting-edge research, quality instruction, and effective outreach to students, landowners, managers, and public agencies of Oklahoma and beyond.

NREM Undergraduate Academic Mission

The undergraduate academic mission of the NREM Department is to prepare our graduates for productive professional and personal lives. This requires developing professional and technical competencies, communication and quantification skills, analytical and problem solving skills, and effective interpersonal abilities that support a strong sense of professional and ethical values.

NREM Strategic Objectives

The NREM department maintains a number of long-term strategic objectives that allow it to adjust and grow to meet the changing needs and demands of Oklahoma citizens and the world. These objectives are to:

1. Conduct research on the organisms, components, and processes of a diverse array of natural ecosystems in Oklahoma and beyond and generate knowledge to apply to the management of these ecosystems.
2. Develop inter-disciplinary, systems approaches that facilitate management of natural resources for sustainable agricultural and forest production and maintenance of ecosystem health.
3. Maintain high quality undergraduate and graduate programs in fisheries, forestry, rangeland, and wildlife ecology and management, and wildlife biology related to pre-veterinary training.
4. Maintain a high quality SAF-accredited undergraduate professional forestry degree program through interdisciplinary instruction and experience from the entire NREM faculty.
5. Involve undergraduate students in research activities as outlined in Objective 1.
6. Enhance existing and develop new Extension and outreach programs that provide stakeholders with the knowledge to make informed decisions regarding management of natural resources, including application of technologies for preservation, conservation, sustainable use, and/or restoration of natural resources.

7. Foster a broad understanding and public appreciation of natural resource conservation and management through collaboration with related disciplines.

SAF Guideline 1 – Maintain the Distinction of Managing Forested Landscapes for Diverse Objectives as an Interdisciplinary Profession.

The NREM department currently offers 5 undergraduate options: forest ecology and management, rangeland ecology and management, wildlife ecology and management, fisheries and aquatic biology, and wildlife biology/pre-veterinary science. It is extremely important to the NREM faculty and staff that students be well versed in natural resource issues and knowledge, while maintaining a strong disciplinary base within each option. The integration of fisheries, forestry, rangeland, and wildlife into a single department demonstrates the commitment for an interdisciplinary approach to education. While there is considerable discipline-specific knowledge that must be taught for each graduation option, faculty from each of the disciplines in the NREM department understand and appreciate other aspects of natural resource management. The integration of our forestry option with the other disciplines within the department is reflected in our departmental mission and vision statement, and in all 7 of the NREM Strategic Objectives listed above.

SAF Guideline 2 – Meeting the Needs of the Constituencies That the Program Seeks To Serve and That Those Objectives Are Consistent with Those of the Parent Institution.

The clientele and stakeholder base and our ability to address multiple issues have become much broader in recent years. In addition to commercial timber production and land management agencies, the current NREM clientele base includes owners of small non-commercial land holdings, specialty product manufacturers, ranchers, hunters, recreational users, and urban dwellers. Our forestry program undergraduates are made aware of the diversity of clientele and stakeholder groups during their educational experience at OSU-NREM. In addition, our NREM Extension specialists address wood products (Dr. Hiziroglu), wildlife management (Dr. Elmore), fire ecology and brush management (Mr. Weir), and grazing management and livestock forages (Dr. Goodman). Students are also involved in outreach programs. These values are reflected in NREM Strategic Objectives 1, 2, 6 and 7 listed above and are consistent with the Oklahoma State University - Division of Agricultural Sciences and Natural Resources (DASNR) mission and vision shown here:

DASNR Mission:

To enhance human well-being and the sustainability of plant, animal and natural resource systems through basic and translational research, undergraduate and graduate teaching, and Extension. This will be accomplished by designing and implementing research, teaching and Extension programs addressing priority issues with respect to Oklahoma, the region, the nation and the world (from the DASNR 2012-2020 vision document).

DASNR Vision

DASNR is dedicated to making available science-based information relevant to improving the quality of life for the people of Oklahoma. DASNR will have programs of state, regional, national, and international eminence in teaching, through the College of

Agricultural Sciences and Natural Resources, research through the Oklahoma Agricultural Experiment Station and outreach through the Oklahoma Cooperative Extension Service.

SAF Guideline 3 - Meeting Diverse, Changing Social, Cultural, Economic, and Environmental Needs and Values.

A population shift from rural to urban centers has been underway for decades throughout the United States (Figure I-1). The urban population is now larger than the rural population in many states, including Oklahoma. In Oklahoma, pre-dust bowl populations in 1930 were two-thirds rural and one-third urban (Table I-1). Those percentages were reversed by 2010, with the dust bowl devastation of rural populations between 1930 and 1950 contributing to that conversion (interestingly, in 1950, the urban/rural population distribution in Oklahoma was 50/50).

More recently, urban populations grew at a faster rate (10.2%) than rural populations (5.9%) from 2000 to 2010. While the percentage of population that is rural remains greater in Oklahoma (34%) than nationally (34 vs. 19%, comparing Fig. I-1 and Table I-1), there is no question that demands from forested lands in Oklahoma will continue to change and students must be prepared to understand and manage new challenges, especially as urban and suburban interests impact resources on rural lands. An additional critically important factor is that all of Oklahoma’s commercial forested land is located in close proximity to the Dallas/Ft. Worth urban area, and urban dwellers from north Texas increasingly view southeastern Oklahoma as a recreational area. These concerns are addressed in NREM Strategic Objectives 1, 2, 6 and 7 listed above.

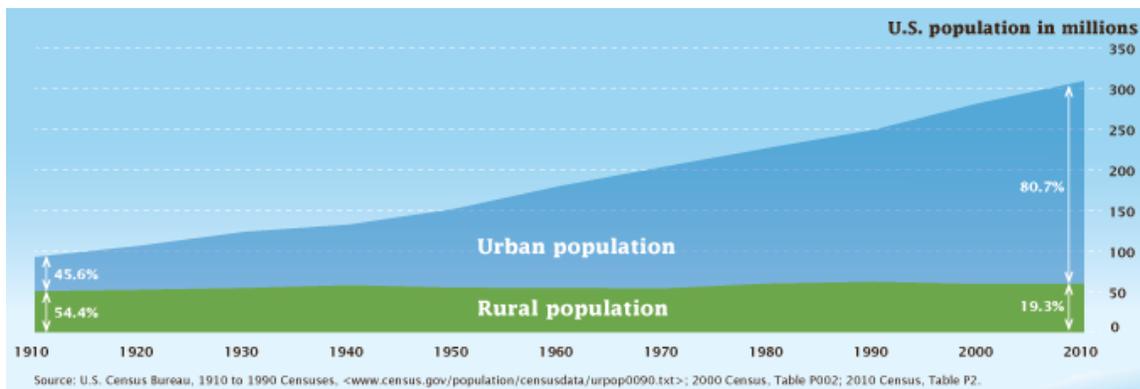


Figure I-1. Urban and rural population count in the U.S., 1910 to 2010.

Table I-1. Oklahoma population data from the U.S. Census Bureau, issued in 2012.

Census Year	Urban Population	Percent Change	Rural Population	Percent Change	Percent Urban	Percent Rural
1910	318,975	---	1,338,180	---	19.2	80.8
1930	821,681	157.6	1,574,359	17.6	34.3	65.7
1950	1,107,252	34.8	1,126,099	-28.5	49.6	50.4
1990	2,049,987	85.1	1,095,598	-2.7	65.2	34.8
2000	2,254,563	10.0	1,196,091	9.2	65.3	34.7
2010	2,485,029	10.2	1,266,322	5.9	66.2	33.8

SAF Guideline 4 - Maintain the Professionalism and Ethical Behavior Necessary to Manage and Use Natural Resources for the Benefit of Society.

To be an effective voice for natural resources, our students need a sound scientific education but also need to cultivate a sense of professional integrity and ethical behavior. Our department emphasizes professional and ethical behavior in our courses and in continuing education. Our faculty and administrative staff continually mentor undergraduate and graduate students on how to conduct business in a professional setting. Participation in student clubs, professional society meetings and career fairs are a few of the many opportunities available to students to develop professional communication skills. Regarding ethics, the University places high priority on academic integrity that is stressed in the syllabus of each departmental course. While the NREM department does not list ethical behavior in any of the strategic objectives listed above, NREM fully adheres to the ethical standards developed and cultivated at the university level.